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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|----------------|----------------------|-------------------------|------------------|
| 10/725,265 | 12/02/2003 | Anatol Rabinkin | 0170-2648 | 4063 |
| 75 | 390 04/28/2004 | | EXAMINER | |
| Ernest D. Buff, Esq. | | | EDMONDSON, LYNNE RENEE | |
| Ernest D. Buff & Associates, LLC 245 South Street | | | ART UNIT | PAPER NUMBER |
| Morristown, NJ 07960 | | | 1725 | |
| | | | DATE MAILED: 04/28/2004 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

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|--|--|---|---|-----------------------|--|--|
| | Application No | • | Applicant(s) | | | |
| | 10/725,265 | | RABINKIN ET AL | | | |
| Office Action Summary | Examiner | | Art Unit | | | |
| | Lynne Edmond | son | 1725 | | | |
| The MAILING DATE of this communication a | | | orrespondence ac | Idress | | |
| Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above, the maximum statutory perion - Failure to reply within the set or extended period for reply will, by stat Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b). | N. 1.136(a). In no event, how reply within the statutory m od will apply and will expire tute, cause the application | vever, may a reply be tim inimum of thirty (30) day a SIX (6) MONTHS from to become ABANDONE | nely filed s will be considered timel the mailing date of this o D (35 U:S.C. § 133). | ly. communication. | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 02 | December 2003. | | | | | |
| 2a) This action is FINAL . 2b) ⊠ Th | his action is non-fir | nal. | | | | |
| 3) Since this application is in condition for allow | vance except for fo | ormal matters, pro | osecution as to the | e merits is | | |
| closed in accordance with the practice under | r <i>Ex par</i> te Quayle, | 1935 C.D. 11, 45 | 53 O.G. 213. | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) 1-22 is/are pending in the application | on. | | | | | |
| 4a) Of the above claim(s) is/are withdo | rawn from conside | ration. | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-5,7-12 and 14-22</u> is/are rejected. | | | | | | |
| 7)⊠ Claim(s) <u>6 and 13</u> is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and | d/or election require | ement. | | | | |
| Application Papers | | | | | | |
| 9)⊠ The specification is objected to by the Exami | iner. | | | | | |
| 10)⊠ The drawing(s) filed on 02 December 2003 is | s/are: ̞a)⊠ accept | ed or b)⊡ object | ed to by the Exan | niner. | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the corre | ection is required if t | ne drawing(s) is ob | jected to. See 37 C | FR 1.121(d). | | |
| 11) The oath or declaration is objected to by the | Examiner. Note th | e attached Office | Action or form P | TO-152. | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the prapplication from the International Bure * See the attached detailed Office action for a li | ents have been recents have been recents have been recented to the second secon | eived. eived in Applicati nave been receive 2(a)). | ion No ed in this National | Stage | | |
| | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) | Interview Summary | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) [| Paper No(s)/Mail Da | ate Patent Application (PT | O-152) | | |
| Information Disclosure Statement(s) (PTO-1449 or PTO/SB/(Paper No(s)/Mail Date | ~~, | Other: | | | | |

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DETAILED ACTION

Specification

- 1. The abstract of the disclosure is objected to because of length. Correction is required. See MPEP § 608.01(b).
- 2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Double Patenting

3. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer <u>cannot</u> overcome a double patenting rejection based upon 35 U.S.C. 101.

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4. Claim 21 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 1 of prior U.S. Patent No. 6656292 B1. This is a double patenting rejection.

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 20 and 22 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 2 of U.S. Patent No. 6656292. Although the conflicting claims are not identical, they are not patentably distinct from each other because both teach an Fe/Cr brazing alloy having a particular composition wherein Cr falls within the range of 5 to 20 % and is in the form of a homogeneous, ductile ribbon. However, the instant claims teach a 5 to 20% Cr range where the '292 claims teach 5 to 10% Cr.

It would have been obvious to one of ordinary skill in the art at the time of the invention that 5 to 10% Cr falls within the broader 5 to 20% Cr of the instant claims.

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Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 8. Claims 1, 8, 15 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Pohlman et al. (USPN 4410604).

Pohlman teaches a heat exchanger (col 1 lines 54-58) and method of manufacture employing an Fe/Cr brazing filler metal (col 1 lines 35-47 and col 2 lines 15-66).

Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claims 2-5, 9-12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pohlman et al. (USPN 4410604) in view of Doi et al. (USPN 6493936 B2).

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Pohlman teaches a heat exchanger (col 1 lines 54-58) and method of manufacture employing an Fe/Cr brazing filler metal (col 1 lines 35-47 and col 2 lines 15-66). However, there is no disclosure a conditioning step.

Doi teaches a method of heat-treating a structure after brazing to improve material properties. The structure is heated to a temperature of 500 C to 600 C for four hours (col 11 lines 40-58).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ a conditioning step after brazing to strengthen the parent metals and thereby improve high temperature service of the heat exchanger while maintaining low brazing temperatures and costs (Pohlman, col 1 line 54 – col 2 line 4).

11. Claims 7, 14, 16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pohlman et al. (USPN 4410604) in view of Bose (USPN 4576873).

Pohlman teaches a heat exchanger (col 1 lines 54-58) and method of manufacture employing an Fe/Cr brazing filler metal (col 1 lines 35-47 and col 2 lines 15-66). However, there is no disclosure of at least 8% B.

Bose teaches an Fe based filler metal comprising 0 to 30% Cr, 0 to 25% Co, 0 to 30% Ni, 0 to 5% W, 0 to 4% Mo, 2 to 25% B and 0 to 15% Si (col 3 lines 10-53 and col 4 lines 16-32). The filler may be in the form of a homogeneous, ductile ribbon (col 2 lines 65-68) which is placed on the part, heated and cooled (col 4 lines 32-49 and col 5 lines 12-19).

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It would have been obvious to one of ordinary skill in the art at the time of the invention to employ higher B for melt suppression and thereby lower brazing temperatures and prevent weakening of the parent metals (Pohlman, col 1 lines 27-39).

Allowable Subject Matter

- 12. Claims 6 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 13. The following is a statement of reasons for the indication of allowable subject matter: The closest prior art teaches the invention essentially as claimed but does not teach conditioning for at least 8 hours. See Pohlman and Doi.

Conclusion

- 14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sjodin (US 2004/0056074, heat exchanger, Fe/Cr braze alloy) and Pattanik (USPN 4402742, heat exchanger, Fe/Cr braze alloy).
- 15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynne Edmondson whose telephone number is (571)

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272-1172. The examiner can normally be reached on Monday through Thursday from 6:30 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lynne Edmondson Primary Examiner Art Unit 1725

LRE